

REMARKS

The Office Action dated July 24, 2008 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1, 3-4, 6, 8, 10, 13-15, 17-26, 28, 30, 32, and 35 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claim 2 was previously cancelled. No new matter has been added. Therefore, claims 1 and 3-35 are currently pending in the application and are respectfully submitted for consideration.

Claim Objections

The Office Action objected to claim 13, indicating that “the tariff control function” should be corrected as “the control function,” in order to correct a lack of antecedent basis. Applicants respectfully submit that claim 13 has been amended to recite “the service control function” rather than “the tariff control function.” Applicants further submit that claim 1 has been amended to recite “a service control function” rather than “a control function.” Applicants further submit that the amendments to claims 1 and 13 effectively moot the objection, and respectfully request that the objection be withdrawn.

Claim Rejections Under 35 U.S.C. § 103(a)

The Office Action rejected claims 1, 3-9, 11-31, and 33-35 under 35 U.S.C. §103(a) as being unpatentable over Hazelwood (US 7,043,229) (“Hazelwood”) in view of Bot et al. (US 2004/0242226) (“Bot”). The Office Action took the position that Hazelwood discloses all the elements of the claims with the exception of “forming at the operation determination function a modified subscriber identity having as its second field at least the content of the second field of the subscriber identity of the terminal that is to terminate the connection and having as its first field the said content of the first field that is associated with that operator,” and similar limitations. The Office Action then cited Bot as allegedly curing the deficiencies of Hazelwood. Applicants respectfully submit that said claims recite allowable subject matter for at least the following reasons.

Claim 1, upon which claims 4-16 and 19-20 are dependent, recites a method, which includes receiving a first message requesting a tariff for a connection and including a subscriber identity field comprising an indication of a subscriber identity of a terminal that is to terminate the connection, each terminal in a communications system being associated with any of a plurality of operators and being addressable by the subscriber identity formatted to include a first field and a second field, the first field being, for at least some of the subscriber identities, indicative of the operator with which a respective subscriber identity is associated. The method further includes determining the operator to which the subscriber identity of the terminal that is to terminate the connection is assigned, and content of the first field that is associated with that operator.

The method further includes forming a modified subscriber identity having as a second field at least a content of the second field of the subscriber identity of the terminal that is to terminate the connection and having as a first field the content of the first field that is associated with that operator. The method further includes forming a second message requesting a tariff for a connection and including a subscriber identity field comprising the modified subscriber identity. The method further includes transmitting the second message to a service control function configured to analyse a subscriber identity received in a message requesting a tariff for a connection to determine a tariff based on the first field of the received subscriber identity.

Claim 3 recites a method, which includes receiving a first message requesting a tariff for a connection, the first message comprising a subscriber identity field and an indication of the type of the connection, wherein the subscriber identity field comprises an indication of a subscriber identity of a terminal that is to terminate the connection, each terminal in a communications system being associated with any of a plurality of operators and being addressable by the subscriber identity formatted to include a first field and a second field, the first field being, for at least some of the subscriber identities, indicative of the operator with which a respective subscriber identity is associated. The method further includes determining the operator to which the subscriber identity of the terminal that is to terminate the connection is assigned, and content of the first field that is associated with that operator. The method further includes forming a modified subscriber identity having as a second field at least a content of the second field of the

subscriber identity of the terminal that is to terminate the connection and having as a first field the content of the first field that is associated with that operator. The method further includes forming a second message requesting a tariff for a connection comprising a subscriber identity field comprising the modified subscriber identity and the indication of the type of the connection. The method further includes transmitting the second message to a control function configured to analyze a subscriber identity received in a message requesting a tariff for a connection to determine a tariff based on the first field of the received subscriber identity and the indication of the type of the connection.

Claim 17, upon which claims 21-22 and 26-35 are dependent, recites an apparatus, which includes an operator determination unit configured to receive a first message, comprising an indication of a subscriber identity of a terminal that is to terminate a connection, each terminal in a communications system configured to be associated with any of a plurality of operators and configured to be addressable by the subscriber identity formatted to include a first field and a second field, where the first field is configured to be, for at least some of the subscriber identities, indicative of a operator with which a respective subscriber identity is associated. The operator determination unit is further configured to determine the operator to which the subscriber identity of the terminal that is to terminate the connection is assigned, and content of the first field that is associated with that operator. The apparatus further includes an identity modifier configured to receive the content and form a modified subscriber identity having as a second field at least a content of the second field of the subscriber identity of the terminal that is to

terminate the connection and having as a first field the content of the first field that is associated with that operator. The apparatus further includes a message former configured to receive the modified subscriber identity and form a second message requesting a tariff for a connection and including a subscriber identity field comprising the modified subscriber identity. The apparatus further includes a message transmitter for transmitting the second message to a service control function configured to control the analysis of a subscriber identity received in a message requesting a tariff for a connection to determine a tariff based on the first field of the received subscriber identity.

Claim 18, upon which claims 23-24 are dependent, recites an apparatus, which includes receiving means for receiving by an operator determination function of a network a first message requesting a tariff for a connection and including a subscriber identity field comprising an indication of a subscriber identity of a terminal that is to terminate the connection, each terminal in a communications system being associated with any of a plurality of operators and being addressable by the subscriber identity formatted to include a first field and a second field, the first field being, for at least some of the subscriber identities, indicative of the operator with which a respective subscriber identity is associated. The apparatus further includes determining means for determining, by the operator determination function, the operator to which the subscriber identity of the terminal that is to terminate the connection is assigned, and content of the first field that is associated with that operator. The apparatus further includes forming means for forming, at the operator determination function, a modified subscriber identity having as

a second field at least a content of the second field of the subscriber identity of the terminal that is to terminate the connection and having as a first field the content of the first field that is associated with that operator. The apparatus further includes forming means for forming, at the operator determination function, a second message requesting a tariff for a connection and including a subscriber identity field comprising the modified subscriber identity. The apparatus further includes transmitting means for transmitting the second message to a service control point configured to analyze a subscriber identity received in a message requesting a tariff for a connection to determine a tariff based on the first field of the received subscriber identity.

Claim 25 recites an apparatus, which includes an operator determination unit configured to receive a first message, comprising an indication of a type of the connection and an indication of a subscriber identity of a terminal that is to terminate a connection, each terminal in a communications system configured to be associated with any of a plurality of operators and configured to be addressable by the subscriber identity formatted to include a first field and a second field, wherein the first field is configured to be, for at least some of the subscriber identities, indicative of a operator with which a respective subscriber identity is associated. The operator determination unit is further configured to determine the operator to which the subscriber identity of the terminal that is to terminate the connection is assigned, and content of the first field that is associated with that operator. The apparatus further includes an identity modifier configured to receive the content and form a modified subscriber identity having as a second field at

least a content of the second field of the subscriber identity of the terminal that is to terminate the connection and having as a first field the content of the first field that is associated with that operator. The apparatus further includes a message former configured to receive the modified subscriber identity and form a second message requesting a tariff for a connection and including a subscriber identity field comprising the modified subscriber identity and the indication of the type of the connection. The apparatus further includes a message transmitter for transmitting the second message to a service control function configured to control the analysis of a subscriber identity received in a message requesting a tariff for a connection to determine a tariff based on the first field of the received subscriber identity and the indication of the type of the connection.

As will be discussed below, the combination of Hazelwood and Bot fails to disclose or suggest all of the elements of the claims, and therefore fails to provide the features discussed above.

Hazlewood discloses a system and method for determining a tariff for real-time wireless service, such as pre-paid service for wireless telephone calls. A tariff determining node receives an initial detection point message which triggers a query to be sent to a location number portability database to determine whether the call is made to or from a ported number. Figures 2, 3, 4 and 5 of Hazlewood clearly show a modified service control point which receives the initial detection point message from a service switching point (SSP) / service switching function (SSF). See at least Col. 4, lines 56-60

of Hazlewood. The SSF is indicated as being the service switching point in Col. 3, lines 60-61 of Hazlewood. Col. 4, lines 65-67 of Hazlewood further discloses that the message includes the mobile subscriber international ISDN number (MSISDN) of the prepaid service subscriber and also the called party number requesting the tariff for the connection.

In Hazlewood, the modified service control point then, either internally or remotely, processes the request by using a local number portability point server, located within the service control point or within the pre-paid service data point to generate a response message which indicates to the service control point whether or not a number has been ported. Dependent on this response message, a prefix may then be used to identify whether the call is within the operator's own network or in another network.

Bot discloses a method for accessing an intelligent network (IN services) implemented in a first telecommunication network by a terminal, which is subscribed to the first network and which is roaming in a second telecommunication network. The second network is coupled to the first network. The method includes the steps initiated by an IN service request number sent from the terminal and received in a second service switching function (SSF) in the second network. The steps include sending an IN service request detect message from the second SSF to a first SCF in the first network, based on the number and sending a redirect message from a second SCF to the second SSF. The redirect message includes a command to establish a connection and a destination number associated with the IN service to be accessed. The method also includes accessing the IN

service from the second SSF by dialing an access number including the destination number. The destination number can include a prefix to the number sent from the terminal.

Applicants respectfully submit that Hazelwood and Bot, whether considered individually or in combination, fail to disclose, teach, or suggest, all of the elements of the present claims. For example, the combination of Hazelwood and Bot fails to disclose, teach, or suggest, at least, *“transmitting the second message to a service control function configured to analyse a subscriber identity received in a message requesting a tariff for a connection to determine a tariff based on the first field of the received subscriber identity,”* as recited in independent claim 1, and similarly recited in independent claims 17-18; and *“transmitting the second message to a control function configured to analyze a subscriber identity received in a message requesting a tariff for a connection to determine a tariff based on the first field of the received subscriber identity and the indication of the type of the connection,”* as recited in independent claim 3, and similarly recited in independent 25.

The Office Action took the position that Hazelwood discloses the PPS Service Script, using the help of the LNPP and LNP database, determines the prefix, then adds that prefix to the Originating/Terminating Location Information parameter, and then forwards the Originating/Terminating Location Information parameter to the PPS SDP for rating. (See Office Action at page 5; see also Hazelwood at col. 5, line 1 – col. 6, line 19). However, independent claim 1, in part, recites receiving a first message,

determining the operator, forming any modified subscriber identity, forming a second message, and transmitting the second message to a service control function configured to analyze a subscriber identity received in the message requesting a tariff for a connection to determine a tariff based on the first field of the received subscriber identity. Independent claims 3, 17-18, and 25 recite similar limitations. Thus, according to the plain language of the claim, illustrated in embodiments of the invention, the processing of the prefix occurs prior to the service control function. The cited portion of Hazelwood fails to disclose, or suggest, this feature.

Additionally, with respect to independent claims 3 and 25, the Office Action correctly concludes that Hazelwood does not disclose receiving a type of connection together with an indication of the subscriber identity of the terminal.

Furthermore, Bot does not cure the deficiencies of Hazelwood. The portion of Bot disclosed by the Office Action discloses that a SCF receives a detect message, comprising an initial detection point message, and determines a prefix to an original number. The SCF then sends a redirect message to a SSF, comprising the original number and the prefix. (See Bot at paragraph 0019). Thus, the cited portion of Bot teaches that the SCF determines a prefix based on the received detect message, and does not disclose, or suggest, receiving a first message, determining the operator, forming any modified subscriber identity, forming a second message, and transmitting the second message to a service control function configured to analyze a subscriber identity received

in the message requesting a tariff for a connection to determine a tariff based on the first field of the received subscriber identity.

Additionally, with respect to independent claims 3 and 25, Bot merely discloses that the detect message comprises a service key which comprises data to determine the type of IN service. (See Bot at paragraphs 0010, 0011, and 0019). Contrary to the Office Action's conclusion, the type of IN service indicates to the SSF which control function is to be activated, and does not indicate the type of connection. (See e.g. Bot at paragraphs 0001-0002).

Therefore, for at least the reasons discussed above, the combination of Hazelwood and Bot fails to disclose, teach, or suggest, all of the elements of independent claims 1, 3, 17-18, and 25. For the reasons stated above, Applicants respectfully request that this rejection be withdrawn.

Claims 4-9, 11-16, and 19-20 depend upon independent claim 1. Claims 21-22, 26-31, and 33-35 depend upon independent claim 17. Claims 23-24 depend upon independent claim 18. Thus, Applicants respectfully submit that claims 4-9, 11-16, 19-22, 26-31, and 33-35 should be allowed for at least their dependence upon independent claims 1, 17, and 18, respectively, and for the specific elements recited therein.

The Office Action rejected claims 10 and 32 under 35 U.S.C. §103(a) as being unpatentable over Hazelwood, in view of Bot, and further in view of Aijala (U.S. Publication No. 2002/0176405) ("Aijala"). The Office Action took the position that the combination of Hazelwood and Bot discloses all the elements of the claims with the

exception of “wherein the messages are SIP INVITE.” The Office Action then cited Aijala as allegedly curing the deficiencies of Hazelwood and Bot. Applicants respectfully submit that said claims recite allowable subject matter for at least the following reasons.

Hazelwood and Bot are described above. Aijala is directed to a method of controlling cost associated with VoIP by including in a call correction set-up message sent over an IP network a maximum charge parameter. The method also includes, when the connection is required to break out of the IP network into a telecommunication network, comparing the maximum charge parameter contained in the set-up message with a charge parameter associated with the breakout part of the connection. The method also includes making a decision on completing the break out part of the connection based on the result of the comparison.

Claims 10 and 32 depend upon independent claims 1 and 17, respectively. As discussed above, the combination of Hazelwood and Bot does not disclose, teach, or suggest all of the elements of independent claims 1 and 17. Furthermore, Aijala does not cure the deficiencies in Hazelwood and Bot, as Aijala also does not disclose, teach, or suggest, at least, *“transmitting the second message to a service control function configured to analyse a subscriber identity received in a message requesting a tariff for a connection to determine a tariff based on the first field of the received subscriber identity,”* as recited in independent claim 1, and similarly recited in independent claim 17. Thus, the combination of Hazelwood, Bot, and Aijala does not disclose, teach, or suggest

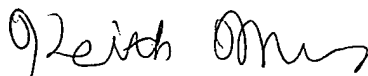
all of the elements of claims 10 and 32. Additionally, claims 10 and 32 should be allowed for at least their dependence upon independent claims 1 and 17, respectively, and for the specific elements recited therein.

For at least the reasons discussed above, Applicants respectfully submit that the cited prior art references fail to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1 and 3-35 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Petition for Extension of Time
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